Answer all the following questions(1×15=15)

1. In which of the following figures are the diagonals equal?
   a) parallelogram
   b) Rhombus
   c) trapezium
   d) rectangle

2. If the diagonals of a quadrilateral bisect each other at right angles, then the figure is a
   a) rectangle
   b) trapezium
   c) rhombus
   d) none of these

3. ABCD is a parallelogram with two adjacent angles equal, then the parallelogram is a
   a) rhombus
   b) kite
   c) rectangle
   d) none of these

4. The bisectors of two adjacent angles of A parallelogram intersect at
   a) 30°
   b) 45°
   c) 60°
   d) 90°

5. If an angle of A parallelogram is two-third of its adjacent angle, the smallest angle of the parallelogram is
   a) 108°
   b) 54°
   c) 72°
   d) 81°

6. If one angle of a parallelogram is 24° less than twice the smallest angle, then the largest angle of the parallelogram is
   a) 68°
   b) 102°
   c) 112°
   d) 136°

7. ABCD is a parallelogram in which angle BDC=45° and angle BAD=75°.Then angle CBD=?
   a) 45°
   b) 55°
   c) 60°
   d) 75°

8. Which of the following is not true for a parallelogram?
   a) opposite sides are equal
   b) opposite angles are equal
   c) opposite angles are bisected by the diagonals
   d) diagonals bisect each other

9. Two equilateral triangles share a common side. Which quadrilateral does the figure form?
   a) square
   b) rectangle
   c) rhombus
   d) kite

10. The diagonals of a quadrilateral are congruent and perpendicular bisectors of each other. Name the quadrilateral
    a) rhombus
    b) rectangle
    c) trapezium
    d) square

11. Name the figure whose diagonals do not bisect at 90°
    a)square
    b)rectangle
    c) rhombus
    d) trapezium

12. In parallelogram ABCD, AC and BD intersect at O.If AC =13.4 cm, then OC is
    a) 6.7cm
    b) 13.4cm
    c) 6 cm
    d) none of these

13. What would you call a figure having four sides out of which two opposite sides are parallel?
    a) square
    b)kite
    c) rhombus
    d)trapezium

14. Isosceles trapezium has
    a) non parallel sides equal
    b) parallel sides equal
    c) non parallel sides unequal
    d) none of these

15. A quadrilateral in which two pairs of adjacent sides are equal is
    a) trapezium
    b) kite
    c) square
    d) rhombus

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